

LASSOTA, Zofia

Oxygen uptake and ammonia release in normal and γ -irradiated eggs of *Bombyx mori*. *Acta biochim. Pol.* 12 no.4:369-377 '65.

1. Institute of Biochemistry and Biophysics, Polish Academy of Sciences, Warszawa.

LASSOVSZKY, Karoly; OSZLACZKY, Szilard

Global analysis of gravimetric registrations. Geofiz kozl 3 no.1/11:
27-30 '54.

LASSU, Bela, okleveles banyamernok

Air-compressed machines used in mining and their appraisal.
Energia es atom 16 no.8:353-357 Ag '63.

l. Pecsi Uranercbanya Vallalat.

L'astanchage, P.F.

Method of protection of packing materials against
rodents. Invention of V. I. Shcherbinin and F. F. Lastochkin,
U.S.S.R. 105,105, Mar. 25, 1957. The materials are pro-
tected against rodents by impregnation with petroleum,
natural or shale bitumen, or coal tar. Packing materials
are protected by coating with molten bitumen or bitumen in
soln.
M. Horeh

H/009/62/000/001/002/003
D286/D304

9.2520

AUTHOR: Lastha, György

TITLE: Transistor carrier frequency repeaters

PERIODICAL: Hiradástechnika, no. 1, 1962, 18 - 24

TEXT: The requirements for transistor carrier frequency repeaters are different from those of valve repeaters. The international recommendations do not define clearly the specifications. The author expresses his view on the subject and invites a discussion. According to CCITT specifications for long lines, the sum of the thermal and intermodulation noises must not be more than 2 pW/km. This requirement influences the transmission level, the amplification, the thermal noise and the distortion. A transmission level of -1 N to -1.73 N is suggested for 12 to 300 channel operation. The known transistors are suitable only up to 500 channel operation and the overload level is 3 N above the transmission level. The experiments with 300 - 400 mW silicon transistors have not yet been satisfactory. The minimum reception level is determined by the thermal noise.

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H/009/62/000/001/002/003

Transistor carrier frequency repeaters

D285/D304

The noise level and amplification are defined in 24, 60 and 120 channel systems, for specified cables. The non-linear distortion is discussed. The noise due to the second harmonic distortion is reduced for the same number of channels if the transmission band begins higher. To compensate for the higher disturbance in the lower channels it is suggested alternating the position of the channels. Calculations for 24, 60 and 120 channel systems are given. The implications of the more complex conditions for the third harmonic are discussed with reference to 24, 60 and 120 channel systems. The measurement of distortion is also considered. The cross-talk between channels and neighboring amplifiers is discussed. Finally, the characteristics that may differ from those of valve repeaters are summarized. There are 2 tables and 9 references: 2 Soviet-bloc and 7 non-Soviet-bloc. The references to the English-language publications read as follows: CCIF Red book, Geneva 1958; S. Janson and V. Stenberg, Some problems concerning noise in wide-band carrier systems, Ericsson Technics, vol. 16, no. 1, 1960, pp. 3-41.

ASSOCIATION: Postakísérleti intézet, a híradástechnikai tudományos egyesület tagja (Experimental Institute of the Post Office, Member of the Scientific Ass.f. Telecommunicat)

Card 2/2

LASTIKOV, M.D.

Electrically driven machine for unloading bricks from annular kilns.
Struci. mat. 6 no. 10:28-29 O '60. (MIRA 13:10)
(Loading and unloading) (Bricks—Transportation)

LASTIKOV, M.D. (Pskov)

The principal thing is the fulfillment of assumed obligations. Shvein. prom. no. 3:6-8 Ja-Jl [i.e. My-Je] '61.
(MIRA 16:11)

LASTIKOV, M.D.

Mechanical grab for loading bricks without using pallets. Stroi.
mat.7 no.2:28 F '61. (MIRA 14:3)
(Bricks--Transportation) (Loading and unloading)

LASTING, V.R.; GURFEL', D.B.

Method of quantitative count of fungi in soil. Mikrobiologija 25
no.5:610-611 8-0 '56. (MLRA 10:1)

1. Institut rasteniyevodstva i Institut melioratsii i osvoyeniya
osushennykh zemel' Akademii nauk Estonskoy SSR, Tallinn
(FUNGI,
in soil, count (Rus))
(SOIL, microbiology,
fungi, count (Rus))

USSR/Soil Science. Biology of Soils.

J-2

Abs Jour: Ref Zhur-Biol., No 6, 1958, 24708.

Author: Lasting, V.R.

Inst:

Title: On Micro-Biological Processes in the Soil With the Ploughing in Green Manure.

Orig Pub: Sotsialistlik pollumajandus, 1957, No 6, 246-247.

Abstract: No abstract.

Card : 1/1

5

APPROVED FOR RELEASE: 06/20/2000 CIA-RDP86-00513R000928720012-0"

SEREDENKO, M.M., [Red.] [Author] M.F. [Editor]
PRAVDIN, M.V.; POMICHEV, V.I.; ALEKSANDROVA, V.P.; GORODETSKIY,
N.I. [Horodets'kyi, N.I.]; DYATLOV, T.I.; KALITA, M.S. [Kalyta,
M.S.]; DARAGAN, M.V. [Darahan, M.V.]; RADINA, Yu.M.; VOROB'YEVA,
K.T. [Vorob'yova, K.T.]; ~~LASTIVKA, N.N.~~; STARODUBSKIY, R.D.
[Starodubs'kyi, R.D.]; YATSENKO, P.F.; MUROMTSEVA, G.M.
[Muromtseva, H.M.]; RASNER, S.I.; CHERNYAK, K.I.; KOBILYAKOV,
I.I. [Kobyliakov, I.I.]; ALEKSANDROVA, V.O., kand.ekonom.nauk,
otv.red.; DEMIDYUK, V.F. [Demydiuk, V.F.], red.; LIBERMAN, T.R.,
tekhn.red.

[Ways of increasing profits in metallurgical industries] Shliakhy
pidvyshchennia rentabel'nosti metalurgiinykh pidpryiemstv. Kyiv,
Vyd-vo Akad.nauk URSR, 1961. 93 p.

(MIRA 14:6)

1. Akademiya nauk USSR, Kiyev. Institut ekonomiki. 2. Institut
ekonomiki AN USSR (for Seredenko, V.P.Aleksandrova, Kalita,
Daragan, Radina). 3. Dnepropetrovskiy khimiko-tehnologicheskiy
institut (for Gorodetskiy, Dyatlov). 4. Dneprodzerzhinskiy
metallurgicheskiy institut (for Kobilyakov).
(Dnepropetrovsk Province--Steel industry--Costs)

LASTKOV, O.A., mayor meditsinskoy sluzhby

Studies on bacteriological pollution of air in living quarters
of the closed type. Voen.med.zhur. no.5:75-77 My '59.
(MIRA 12:8)

(AIR, microbiology
in communal living quarters (Rus))

(HOUSING,
air microbiol. in communal living quarters
(Rus))

LASTKOV, O.A. (Kronstadt)

Nitrates in water in cement storage units. Gig. i san. 24 no.9:78
S '59. (MIRA 13:1)
(WATER--POLUTION) (CEMENT--HYGIENIC ASPECTS)

LASTKOV, O.A.

Nomogram for counting the total caloric value of ready-to-eat dishes.
Gig. i san. 24 no.10:79 '59. (MIRA 13:1)
(FOOD)

LASTKOV, O.A. (Kronshtadt)

Spoilage of food products under the influence of vapors from
ethynyl stains. Vop.pit. 19 no.1:89 Ja-F '60. (MIRA 13:5)
(ACETYLENE related cpds.)
(PAINT)
(FOOD)

LASTKOV, O.A. (Krondshadt)

Titratable and active acidity of bread. Vop. pit. 19 no.3:76-77
My-Je '60. (MIRA 14:3)
(BREAD)

LASTKOV, O.A., mayor med.sluzhby

Portable apparatus for determining the porosity of bread. Voen.-med.
zhur. no. 8: 85-86. Ag '60. (MIRA 14:7)
(BREAD-STANDARDS) (MEDICINE, MILITARY)

LASTKOV, O.A.; LASKAVAYA, F.P. (Kronshatadt)

Names of Russian physicians on the map of the world. Sov. zdrav.
19 no.3:67-68 '60. (MIRA 14:6)
(PHYSICIANS, RUSSIAN)

LASTKOV, O.A. (Kronshtadt)

Actographic investigations for a hygienic evaluation of the atmosphere.
Gig.i san. 25 no.9:53-56 S '60. (MIRA 13:9)
(AIR) (SLEEP)

ISAYEV, V.I.; LASTKOV, O.A.

Nomogram for the determination of sugar in urine by Bertran's
method. Lab. delo 7 no.2:36 F '61. (MIRA 14:1)
(URINE—ANALYSIS AND PATHOLOGY)
(SUGAR IN THE BODY)

LASTKOV, O.A., dotsent

Use of bactericidal lamps in rooms devoid of natural light.
Vrach.delo no.12:130-132 D '62. (MIRA 15:12)

1. Kafedra obshchey gigiyeny (zav. - prof. A.A.Mal'kov)
Donetskogo meditsinskogo instituta.
(GERMICIDAL LAMPS)

VANKHANEN, V.D.; LASTKOV, O.A.

Vitamin C metabolism in experimental silicosis. Vop.pit. 24
no.3:13-17 My-Je '65. (MIRA 18:12)

1. Kafedra obshchey gigiyeny (zav. - dotsent O.A. Lastkov)
i gigiyeny pitaniya (zav. - dotsent A.M. Zhistyakov)
Donetskogo meditsinskogo instituta. Submitted August 18,
1964.

LASTOCHKIN, A.N.

LASTOCHKIN, A.N.

Glaciological observations in the Myndzhin^{ky} Valley (Kirghizian
Ala-Tau). Vest. LGU 17 no.18:112-119 '62. (MIRA 15:10)
(Lastochkin, A.N.)

LASTOGLIN, S.F., Cand Tech Sci_x (diss) "Study of ~~the~~ conditions of oscillations ^{in circuit} excitation of subharmonic ~~phenomena~~ in an oscillating ~~circuit~~ with non-linear inductivity." Nov, 1958. 14 pp (Min of Higher Education USSR. Mos Order of Lenin Power Engineering Inst. Chair of the Scientific Bases of Electrical Engineering), 150 copies (M, 6-50, 1'1)

- 4 / -

LASTOCHKIN, B.F., aspirant

Investigating the conditions of the excitation of subharmonic oscillations in the oscillatory circuit with nonlinear inductance.
Trudy MEI no.27:205-218 '58. (MIRA 13:4)
(Electric circuits)

LASTOCHKIN, B. I.

LASTOCHKIN, B. I. "On the problem of the technique of the reconstructive operation on the forearm", Sbornik nauch. trudov Khabarovskogo gospitalya, III, Khabarovsk, 1948, p. 112-17.

SO: U-4393, 19 August 53, (Letopis 'Zhurnal 'nykh Statey', No. 22, 1949).

LOGVINENKO, P.I., kand.med.nauk; LASTOCHKIN, B.I.; MAKAROV, A.Ye.

Pulmonary resection in tuberculomas. Probl.tub. no.6:58-61
'61. (MIRA 14:9)
(TUBERCULOSIS) (LUNGS—SURGERY)

LASTOCHKIN, D., RYZIN, V.

Concrete Construction

Building with "filled" concrete blocks Sel'. stroi. no. 3(44) 1952.

Monthly List of Russian Accessions, Library of Congress, August 1952. UNCLASSIFIED.

LASTOCHKIN, D.

Moscow Province - Building

New building practices on collective farms of Moscow Province.
Sel'. stroi. 8 no. 1, 1953

9. Monthly List of Russian Accessions, Library of Congress, May 1953, Uncl.

LASTOCHKIN, D.A.

Deceased

Forestry

See ILC

LASTOCHKIN, D.S., inzhener.

Canal excavation with the KPU-2000A drag-line trench digger. Mekh.stroi.
10 no.6:21-23 Je '53. (MLRA 6:6)
(Excavating machinery)

LASTOCHKIN, D. S.

LASTOCHKIN, D. S.- "The Rotor as the Working Organ of Channel-cleaning Machines
(selection of Type and of Basic Parameters)." Min of Agriculture USSR, All-Union Sci Res
Inst of Hydrotechnics and Melioration, Moscow, 1955! (Dissertations For Degree of Candidate
of Technical Sciences)

SO: Knizhnaya Letopis' No. 26, June 1955, Moscow

LASTOCHKIN, D.S., inzhener.

The DDP-30-S sprinkler. Sel'khozmashina no.1:16-18 Ja '55.
(Sprinklers) (MIRA 8:3)

LASTOCHKIN, D.S., kandidat tekhnicheskikh nauk.

Leveling of irrigated areas. Gidr. i mel. 8 no.7:18-22 J1 '56.
(Earthmoving machinery) (MLRA 9:9)

LASTOCHKIN, D.S., kandidat tekhnicheskikh nauk.

Mechanized cleaning of canals. Sel'khozmashina no.12:21-23
D '56. (MLRA 10:2)

(Irrigation canals and flumes) (Dredging machinery)

111-58-7-6/27

AUTHOR: Lastochkin, D.S., Candidate of Technical Sciences, Head of the KONIIS Laboratory

TITLE: A New Method of Laying Cable, Using a Cutter Cable-Layer
(Novyy metod prokladki kabelya pri pomoshchi nozhevogo kabeleukladchika)

PERIODICAL: Vestnik svyazi, 1958, Nr 7, pp 10-11 (USSR)

ABSTRACT: The author compares the effectiveness of using a chain of 5-7 tractors, or one tractor fitted with a winch for pulling a cutter cable-layer. The chain system is unsatisfactory in practice since it is impossible to coordinate exactly the speeds of all the tractors. One is always pulling the others, resulting in a considerable drop in tractor efficiency. Various combinations of tractor-winches and self-propelled winches are described. The most satisfactory proved to be a winch mounted on a tractor and fitted with an anchoring stop-plate. The winching tractor pays out rope, the stop-plate digs in and prevents the tractor from being drawn backwards, and the cable-layer is winched up. Using a C-80 tractor and winch developing a tractive force of 28 tons, the tractor efficiency works out at

Card 1/2

A New Method of Laying Cable, Using a Cutter Cable-Layer 111-58-7-6/27

800 m/hr. Compared with that of a chain of 4 tractors (565 m/hr) this represents an increase of 42 %. Allowing for the difference in speed between the two systems and the time taken up by the other essential working operations, the overall productive efficiency of the chain system is 62% m/hr and that of the tractor-winch assembly 470 m hr, i.e. a drop of only 32 % with the use of only one tractor.. There is one graph and 1 sketch.

ASSOCIATION: Laboratoriya KONIISa (Laboratory of the KONIIS)

Card 2/2 1. Cables—Installation 2. Tractors—Applications

~~LASTOCHKIN, D.S., kand.tekhn.nauk~~

Using cable laying units with tractor-mounted winches. Mekh.
stroi. 16 no.2:24-25 F '59. (MIRA 12:2)
(Telephone cables) (Winches)

LASTOCHKIN, D.S., kand. tekhn. nauk

Trenchless laying of underground pipelines for subsurface irrigation
and drainage. Stroi. i dor. mash. 9 no.9:16-18 S '64.
(MIRA 17:11)

LASTOCHKIN, D.S., kand. tekhn. nauk (Kiyev)

Strengthening the walls of mole drains for subsoil irrigation
and drainage. Gidr. i mel. 16 no.10:25-29 O '64.

(MIRA 17:12)

L 39090-66 EWT(m)/I/EWP(t)/ETI IJP(c) DS/JD/JG
ACC NR: AP6022878

SOURCE CODE: UR/0186/66/008/002/0197/0206

AUTHOR: Ziv, D. M.; Sukhodolov, G. M.; Fateyev, V. F.; Lastochkin, L. I.

ORG: none

TITLE: Study of the electrochemical behavior of elements present in low and ultralow concentrations in solution. Part 1. Dependence of the deposition potential of lead on platinum and gold electrodes on the Pb^{2+} concentration in solution

SOURCE: Radiokhimiya, v. 8, no. 2, 1966, 197-206

TOPIC TAGS: electrodeposition, lead, platinum, gold, electrode potential

ABSTRACT: A review of the literature shows that the nature of the electrode material on which the electrodeposition of an element from ultradilute solutions takes place plays a major part in the electrodeposition process. In this connection, the effect of the electrode material on the electrodeposition of lead on gold and platinum electrodes in nitric acid solutions was studied by means of polarization curves of the second kind. ThB (Pb^{212}) was used as the radioactive tracer for lead. The dependence of the critical deposition potential of lead, ϕ_{cr} , on its content in the solution was studied over a wide range of lead concentrations (10^{-12} to 10^{-2} g-ion/l). The curve expressing this dependence was found to have three regions: 1) region of constant ϕ_{cr} , (2) intermediate region, and (3) region of linear dependence of ϕ_{cr} on $\log C$,

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UDC: 543.53:546.815

39
B

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ACC NR: AP6022878

i. e., the Nernst region. It was found that on platinum electrodes, ϕ_{cr} in the region of independent potentials is 0.110 V higher than on gold. The width of the intermediate region on platinum is two orders of magnitude smaller than on gold. In the Nernst region, the values of n (from the Nernst equation) were found to be 1.46 and 1.45 for platinum and gold electrodes respectively. Orig. art. has: 5 figures, 3 tables, and 3 formulas.

SUB CODE: 07/ SUEM DATE: 26Dec64/ ORIG REF: 006/ OTH REF: 009

L 39088-66

EWP(e)/EWI(m)/T/EWP(t)/ETI

IJP(c) WH/DS/JD/WW

SOURCE CODE: UR/0186/66/008/002/0206/0210

ACC NR: AP6022879

AUTHOR: Ziv, D. M.; Sukhodolov, G. M.; Fateyev, V. F.; Lastochkin, L. I.

ORG: none

TITLE: Study of the electrochemical behavior of elements present in low and ultralow concentrations in solution. Part 2. Deposition of lead on graphite electrodes /5/

SOURCE: Radiokhimiya, v. 8, no. 2, 1966, 206-210

TOPIC TAGS: lead, graphite, electrode potential, electrodeposition

ABSTRACT: The paper continues a study of the dependence of the deposition potential of lead on its concentration in solution. The effect of the nature and concentration of the electrolyte on the value of the critical deposition potential ϕ_{cr} of lead on graphite electrodes was investigated by means of the method of polarization curves of the second kind. A study of the effect of solution acidity (0.1 and 3 N HNO_3) on ϕ_{cr} in the 10^{13} - 10^{-1} g-ion/l range of lead concentrations showed that the HNO_3 concentration has a substantial influence on the course of the dependence of ϕ_{cr} on log C_{Pb}^{2+} in the range of ultralow lead concentrations (from 10^{-13} to 10^{-7} g-ion/l). This influence is insignificant at lead concentrations above 10^{-6} g-ion/l. A study of the dependence of ϕ_{cr} on log C_{Pb} in 1 N perchloric and nitric acid solutions showed that the nature of these acids has no appreciable influence on this dependence. Values of

UDC: 543.53:546.815

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L 39088-66

ACC NR: AP6022879

the critical electrodeposition potentials of lead on graphite electrodes, obtained by methods of polarized curves of the first and second kind, were compared and found to agree satisfactorily. Orig. art. has: 4 figures and 5 tables.

SUB CODE: 07/ SUBM DATE: 26Dec64/ ORIG REF: 006

Card 212 NCLP

LASTOCHKIN, P.N.

Hygiene in relation to I.P.Pavlov's teaching. Gig.sanit., Mo-
skva no.4:7-14 Ap '50. (GLML 19:3)

1. Report presented at the Leningrad Hygienic Society and at the
All-Union Subject Planning Conference of the Institute of General
and Communal Hygiene of the Academy of Medical Sciences USSR
(4 February 1950).

LASTOCHKIN, P.N.

Results in application of conditioned reflexes for sanitary de-
termination of certain ingredients of the surrounding media. Gig.
Sanit., Moskva No.1:6-9 Jan 51. (CIML 20:5)

1. Of Leningrad State Pediatric Medical Institute.

LASTOCHKIN, Pavel Vladimirovich; IZRAL'YANTS, Vasiliy Mikhaylovich; BEL'SKIY
I.R., redaktor; FEDOROV, B.M., redaktor; SHITS, V.P., tekhnicheskiy
redaktor.

[Operating selenium rectifiers] Ekspluatatsiya selenovykh vypriami-
telei. Moskva, Goslesbumizdat, 1955. 30 p. (MLRA 9:5)
(Electric current rectifiers)

ZALEGALLER, B.G.: LASTOCHKIN, P.Y.

Automatic sawing of pit props. Trudy Len. lesotekh. akad. no.78:
57-68 '57. (MIRA 11:10)
(Sawmills)

LASTOCHKIN, P.V.; SYRNIKOV, Yu.P.

Roentgenoscopy of wood. Nauch. trudy LTA no.96:25-32 '61.
(MIRA 17:3)

ZALEGALLER, Boris Grigor'yevich, kand. tekhn. nauk; LASTOCHKIN,
Pavel Vl^{adimirovich}, kand. tekhn. nauk; VOYEVODA, D.
kand. tekhn. nauk, retsentent; SOLOV'YEV, N.S., red.

[Mechanization and automation of the operations on lumber
landings] Mekhanizatsiia i avtomatizatsiia rabot na les-
nykh skladakh. Moskva, Lesnaia promyshlennost', 1965.
443 p.
(MIRA 19:1)

VESELOV, Ye.A., prof.; VSYAKIKH, A.S., prof.; DENISOV, N.I., prof.; GERCHIKOV, N.P., prof.; LASTOCHKIN, S.N., prof.; ALIKAYEV, V.A., dots.; BESSARABOV, V.A., dots.; KALININ, V.I., dots.; SOKOLOV, A.K., dots.; ZAVARSKIY, A.I., red.; DEYEVA, V.M., tekhn. red.

[Animal husbandry and veterinary hygiene] Zhivotnovodstvo i zoogigiena. [By] E.A.Veselov i dr. Izd.2., perer. i dop. Moskva, Sel'khozizdat, 1963. 451 p. (MIRA 17:2)

ALISHEYKHOV, A.M., aspirant; LASTOCHKIN, S.N., prof., nauchnyy rukovoditel'
raboty

Reproduction capacity of nurse cows. Veterinariia 41
no.10:65-66 O '64. (MIRA 18:11)

1. Moskovskaya veterinarnaya akademiya.

LASTOCHKIN,S.V., razmetchik leningradskogo mashinostroitel'nogo zavoda

Friendship bonds. Nauka i zhizn' 22 no.8:30-32 Ag'55. (MIRA 8:10)
(Machinery industry)

DESHEVOY, G.M.; MIROSHNICHENKO, B.Ya.; LASTOCHKIN, S.V. Prinimali
uchastiye: BURDIN, N.K.; GUDKOV, N.M.; SERGEYEV, M.A., inzh.,
retsenzent; YAKOVITSKIY, G.N., red.; LEYKINA, T.L., red.izd-
va; KUREPINA, G.N., red.izd-va; SHCHETININA, L.V., tekhn. red.;
SPERANSKAYA, O.V., tekhn.red.

[Manual for a lay-out mechanic] Spravochnik razmetchika-
mashinostroitelia. Moskva, Mashgiz, 1962. 375 p. (MIRA 16:1)
(Laying-out (Machine-shop practice))

LASTOCHKIN, V., inzh.

Housing construction combine No. 1. 2nd stroi. no. 7:13-15
Jl '61. (MIRA 14:8)
(Minsk--Precast concrete)

LASTOCHKIN, V.A., inzh.

Qualitative composition of natural gas in the Chelyabinsk coal
basin. Izv. vys. ucheb. zav.; gor. zhur. 6 no.6:3-5 '63.
(MIRA 16:8)

1. Chelyabinskij politekhnicheskiy institut. Rekomendovana
kafedroy stroitel'nykh materialov.
(Chelyabinsk Basin--Gas, Natural)

LASTOCHKIN, V.A.

More on the prospects for finding oil and gas in the
Chelyabinsk Basin. Izv. vys. ucheb. zav.;geol. i razv.
8 no. 12:146-148 D '65 (MIRA 19:1)

1. Sverdlovskiy gornyy institut imeni V.V. Vakhrusheva.

SOV/97-58-12-8/13

AUTHORS: Tarasov, I.M. and Lastochkin, V.G., Engineers

TITLE: Prestressed Reinforced Concrete Poles and Sleepers,
Factory Manufactured (Predvaritel'no napryazhennye zhelezobetonnyye machty i shpaly, izgotovlyayemye na kombayne).

PERIODICAL: Beton i Zhelezobeton, 1958, Nr.12, pp.469-470 (USSR)

ABSTRACT: Minsk Factory for Reinforced Concrete products manufactures poles for street electric lighting, and sleepers for narrow gauge railways (750 mm), using wire reinforcement. These products are manufactured on 130 m long concreting plant. The poles for street lighting were designed by the Belorussian Polytechnic Institute, Department of Building Construction (Beloruskiy politekhnicheskiy institut, kafedra stroitel'nykh konstruktsiy). The poles are 9.4 m long, octagonal and hollow in cross section, tapering towards the top; the bottom section is 34 cm and the top 16 cm wide. The concrete used is of mark 400, and the reinforcement consists of 42 wires of 2.6 mm diameter. Tests carried out showed that strength and resistance to crack formation are satisfactory. Fig.1

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Prestressed Reinforced Concrete Poles and Sleepers, Factory
Manufactured.

shows tensioning of high tensile wires. The concrete, in forms, is consolidated using internal vibrator I-50. Experience showed that for uniform curing the steam tubes must be carried through the void of the pole to a depth of at least 1.5 m. The curing lasts 20-24 hours. The products are then cooled for 4 hours. 450 kg of high quality cement is used per 1 m³ of concrete. The water/cement ratio is 0.45:0.5. Consumption of concrete per pole is 0.32 m³; for the arm, 0.05 m³, for the base 0.22 m³ and for the foundation 1.64 m³, making a total of 2.25 m³. The total consumption of steel per pole is 46 kg. The sleepers were designed by the Planning Institute, Belgiprotorf (Proyektnyy institut Belgiprotorf). They are reinforced with steel wires of 2.6 mm diameter. The concrete used is of mark 500. The sleepers are cast in reinforced concrete forms with special metal attachments forming seating for the rail's saddle. When the concrete reaches 70% of the calculated strength (i.e. after 36-48 hours) the continuous form with cast sleepers is cut to pre-determined

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SOV/97-58-12-8/13

Prestressed Reinforced Concrete Poles and Sleepers, Factory Manufactured.

lengths. The form is 150 cms long, 100 cms wide, and is made from concrete mark 200. Five sleepers are cast in each form. The factory can also produce prestressed reinforced concrete hollow floor slabs. In this case the consolidation is carried out by external vibrators, whereas in the case of sleepers surface vibration is not sufficient on account of the reinforcement and the timber divisions in the form. In casting sleepers, therefore, vibrators have to be situated at various heights and various angles of inclination (5, 10 and 20°). The cement used for sleepers is of rapid-hardening type produced by Volkovysk factory. 550 kg cement is used for 1 m³ of concrete. Concrete tests were carried out on 12 test cubes of 10 x 10 x 10 cm. The first 3 cubes were tested before the tensioning was released, the following 3 were tested repeatedly on successive days; 3 were tested before checking their strength, and the remaining 3 cubes were kept in reserve in case some tests should have to be repeated.

Card 3/4

LASTOCHKIN, V. I.

Salmon

"Growing salmon fry in wooden troughs." Ryb. khoz. 28 no. 5, 1952.

9. Monthly List of Russian Accessions, Library of Congress, October 1953, Uncl.
2

L 14695-63

ENT(d)/ENT(1)/FBD/PCC(w)/BDS/T-2/EEC-2/EED-2/ES(v)/ES(t)-2
NPFIC/AFMDC/APSC/ASD/ESD-3/SSD P-1/P1-4 PT-2/G1
S/0141/63/006/003/0629/0630 89

ACCESSION NR: AP3004850

86

AUTHOR: Lastochkin, V. P.; Perfir'yev, V. A.; Stankevich, K. S.; Troitskiy,
V. S.; Kholodilov, N. N.; Tseytlin, N. M.

TITLE: Precision measurements of radiation intensity from discrete sources in
Cas-A, Cyg-A, and Tau-A in the decimeter band

SOURCE: IVUZ. Radiofizika, v. 6, no. 3, 1963, 629-630

TOPIC TAGS: Cas-A, Cyg-A, Tau-A, radiation source, radio source, cosmic source,
radiation temperature, antenna temperature, black body

ABSTRACT: Test results and receiving equipment are described for radio reception
recorded in the autumn of 1962 from discrete sources in Cas-A, Cyg-A, and Tau-A
in the decimeter band. An 8-meter parabolic antenna was used which was designed
to track a given source by maintaining an optical match with a visible star pat-
tern in which the source location was known. Tracking error by this means was
of the order of $\pm 0.5^\circ$. Operating wavelengths were 25.2, 34.2, 42.4, and 54.3 cm,
for which the pattern widths were 150, 200, 240, and 300 $^\circ$, respectively. For
each source a nearby cosmic region was chosen as a reference point, the same

Cord. 1/p 2

L 24695-63

ACCESSION NR: AP3004850

point being used for all wavelengths. The receiver used was a wideband modulated type with sensitivity of 0.3-0.4K at a 16-sec time constant. Compensation for temperature drift in the antenna and its cold standard was provided by a gas discharge tube fed via directional coupler to the antenna; a further correction was made for the difference in steady-state background noise levels existing between the measured source and its reference point. Absolute calibration of received signals was made against radiation from a black-body disk "mcon" of the type used earlier by Krotikov et al. (Izv. vyssh. uch. zav. - Radiofizika, 4, 1004 (1961)) in similar measurements, which subtended an angle of 56.34' and was elevated 26° above the horizon to minimize diffraction effects. Radiation temperature of the disk fell between 3 and 12K depending on wavelength, while source radiations were in the 4-20K range. The results are tabulated, giving both absolute flux density and density relative to the particular reference calibration area. Flux density tended to increase with longer wavelengths and was generally greatest from the Cas-A source, with a measured maximum of about 50×10^{-24} w/m²/cps at 53.4 cm. The rms errors are included; they had a maximum calculated to be $\pm 10.5\%$. The coordinates of sources and reference areas are given. "The authors are deeply grateful to Ya. M. Parnes and T. V. Shikina under whose direction the coating for the black-body disk was prepared and ASSOCIATION; Radiophysical Scientific Research Inst. Gorky St. Un.

Card 2/32

L117691-63 EWT(1)/FHD/FCC(w)/BDS/EEC-2/ES(v) AFFTC/ESD-3
Re-1/P1-1/Pg-1 PT-2

ACCESSION NR: AP3004851

S/0141/63/006/003/0631/0631

76
75

AUTHOR: Lastochkin, V. P.; Plankin, E. S.; Stankevich, K. S.

TITLE: Precise flux density measurement of the discrete source in Cassiopeia-A
at 3.2 cm

SOURCE: IVUZ. Radiofizika, v. 6, no. 3, 1963, 631

TOPIC TAGS: radio source, cosmic radio source, Cassiopeia-A, Cas-A, cosmic radiation, radiation flux density, discrete radio source, radio telescope, radio brightness

ABSTRACT: Results of 3.2-cm radiation recorded from Cas-A in the fall of 1962 proved to agree within 1% with those reported earlier by Stankevich (Astron. zh., 39, 610(1962)) which indicates good repeatability of the method. As before, calibration was against a black-body disk placed in the Fraunhofer zone of the antenna and subtending 8.8' at an elevation of 22°. On the basis of 80 measurements, the flux density at 3.2 cm was found to be 5.14×10^{-28} w/m²/cps, at an overall rms. error of +5%. When combined with existing 10.26-cm data from Cas-A, this yields a spectral index of -0.87 for the centimeter band, which differs

Card 1/2

L 17691-63

ACCESSION NR: AP3004851

somewhat from the presently accepted value of -0.80.

ASSOCIATION: Nauchno-issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete (Scientific Research Institute of Radio Physics, Gorkiy University)

SUBMITTED: 22Jan63

DATE ACQ: 27Aug63

ENCL: 00

SUB CODE: AS

NO REF Sov: 003

OTHER: 001

Card 2/2

ACCESSION NR: AP4017031

S/0141/63/006/006/1098/1102

AUTHORS: Lastochkin, V. P.; Stankevich, K. S.

TITLE: Measurement of the absorption coefficient in the atmosphere
in the decimeter radio band

SOURCE: IVUZ. Radiofizika, v. 6, no. 6, 1963, 1098-1102

TOPIC TAGS: radioastronomy, radio emission from sun, radio emission
absorption, decimeter radio band, absorption coefficient, solar
radio emission, solar radio emission absorption

ABSTRACT: Radio emission from the sun was measured with an 8-meter
parabolic antenna at 25, 32.5, 44.3, and 56.5 cm. Errors due to
the variation of the apparatus parameters were eliminated by cali-
bration against radio emission from a nearby mountain, which was
found to be almost absolutely black to the radiation. Absorption
at the zenith was found to be 0.05 dB at all wavelengths. Addi-

Card 1/3 ✓

L 15218-65 FBD/EWT(1)/EWG(r)/EEC-4/EEC(t) Pe-5/Pae-2/Pi-4 ASD(a)-5/
RAEM(a)/ESD(c)/ESD(t) GW/WB

S/0141/64/007/004/0789/0790

ACCESSION NR: AP4048272

AUTHORS: Lastochkin, V. P.; Stankevich, K. S.

B

TITLE: Experimental observation of fluctuations of the temperature
of the atmospheric radio emission

SOURCE: IVUZ. Radiofizika, v. 7, no. 4, 1964, 789-790

TOPIC TAGS: atmospheric noise, radio signal, signal detection, sig-
nal fluctuation

ABSTRACT: An attempt was made to observe experimentally the atmos-
pheric radio emission fluctuations whose existence was theoretically
deduced in an earlier paper by one of the authors (K. S. Stankevich
and L. N. Bondar', Izv. vyssh. uch. zav. -- Radiofizika v. 6, 670,
1963). The tests were made at 3.2 meters with a parabolic antenna
4 m in diameter subtending 36° at the half-power points. The radio-
meter was sensitive to 0.5°K at a time constant of 1 second. The

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L 15218-65

ACCESSION NR: AP4048272

2

measurements were made at a time constant of 16 seconds. The received signal was calibrated against the radio-emission temperature of an absolutely black "mountain" covering the entire principal lobe of the directivity pattern. The method used to exclude the intrinsic noise of the radiometer is briefly described. Although good agreement between theory and experiment could not be obtained under these conditions, the results can be regarded as proof of existence of radio emission from the standard atmosphere. "The authors thank N. G. Denisov for a valuable remark." Orig. art. has: 5 formulas.

ASSOCIATION: Nauchno issledovatel'skiy radiofizicheskiy institut
pri Gor'kovskom universitete (Scientific Research Radiophysics Institute at the Gor'kiy University)

SUBMITTED: 06Nov63

ENCL: 00

SUB CODE: EC

NR REF SOV: 004

OTHER: 000

Card 2/2

LASTOCHKIN, V.P.; STANKEVICH, K.S.

Secular decrease of the flux of Cassiopeia-A in the centimeter
wave range. Astron. zhur. 41 no.48'69-770 Jl-Ag '64
(MIRA 17:8)

1. Nauchno-issledovatel'skiy radiofizicheskiy institut pri
Gor'kovskom universitete.

LASTOCHKIN, V.P.; SORIN, Yu.M.; STANKEVICH, K.S.

Spectrum of radio emission of the discrete source of
Cygnus-A. Astron. zhur. 41 no.4:770-771 Jl-4g '64
(MIRA 17:8)

1. Nauchno-issledovatel'skiy radiofizicheskiy institut pri
Gro'kovskom universitete.

LASTOCHKIN, V.P.; STANKEVICH, K.S.

Experimental determination of fluctuations in the temperature of atmospheric radio emission. Izv.vys.ucheb.zav.; radiofiz. 7 no.4:789-790 '64.
(MIRA 18:1)
1. Nauchno-issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom
universitete.

L-21108-65 EWT(1)/EWA(M) Pub. ESDIC

ACCESSION NR.: AP5002329

AUTHOR: Iastachkin, V. P.; Stankevich, K. S.

TITLE: Measuring the absorption of 3.2-cm radio waves in the atmosphere

SOURCE: IVUZ. Radiofizika, v. 7, no. 5, p. 975-980, 1964.

TOPIC TAGS: radio wave absorption, radio wave measurement

ABSTRACT: In this study of absorption of 3.2-cm radio waves in the atmosphere by oxygen and water vapor, the sensitivity of 0.5K with a time constant of 1 sec. was used. The antenna dish had a diameter of 4 m. Calibration of the radiometer was accomplished by comparison with the radiation pattern of an absolutely black body which was situated in the Fraunhofer major lobe of the radiation pattern. The effective altitude of radio-wave absorption was 0.5 and 1.8 km, respectively. It was found that absorption of 3.2-cm waves in oxygen was 0.054 db and in water vapor, $7 \cdot 10^{-4} \text{ db} \cdot \text{m}^3 \cdot \text{km}^{-1} \cdot \text{g}^{-1}$. The accuracy of these results was $\pm 7\%$.

Card 1/2

RB

S/0141/64/007/005/0984/0985

b1, K, S.; Strezhneva, K. M.

3.2-cm radio waves in the atmos-

phere, 1964, 1984-1985

radio wave measurement 9M

on of 3.2-cm radio waves in the atmosphere, the radiometer used had a sensitivity of 0.5K with a time constant of 1 sec. The antenna dish had a diameter of 4 m. Calibration of the received signals was accomplished by comparison with the radiation pattern of an absolutely black body which was situated in the Fraunhofer major lobe of the radiation pattern. Under the assumption that the absorption in oxygen and water vapor is proportional to the concentration of the gas, it was found that absorption of 3.2-cm waves in oxygen was 0.054 db and in water vapor, $7 \cdot 10^{-4} \text{ db} \cdot \text{m}^3 \cdot \text{km}^{-1} \cdot \text{g}^{-1}$. Orig. art. has 1 figure

L 21108-65

ACCESSION NR: AP5002329

and 4 formulas.

ASSOCIATION: Nauchno-issledovatel'skiy radiofizicheskiy institut
pri Gor'kovskom universitete (Scientific Research Institute of Radio
Physics at the Gorky State University)

SUBMITTED: 06Nov63 ENCL: 00 SUB CODE: EC, ES

NO REF SOV: 002 OTHER: 000 ATD PRESS: 3164

Card 2 / 2

L 21723-65 EEC-4/ENG(v)/EWT(1)/EEC(t)/FBD Po-5/Pi-4/Pao-2 AFWL/SSD(b)/
BSD/LSD(c)/ASD(a)-5/APETR/RAEM(a)/ESD(gs)/ESD(t)/SSD GW/HS

ACCESSION NR: AP4043962

S/0033/64/041/004/0759/0770

AUTHOR: Lastochkin, V. P.; Stankevich, K. S.

TITLE: Secular decrease of the flux of Cassiopeia-A in the centimeter range

SOURCE: Astronomicheskly zhurnal, v. 41, no. 4, 1964, 769-770

TOPIC TAGS: astrophysics, radio emission, artificial moon, Cassiopeia-A, radio astronomy

ABSTRACT: In 1960, I.S. Shklovskiy postulated a possible secular decrease of the radio emission flux of the discrete source Cassiopeia-A, which according to computations should decrease by 1.7% annually. This effect was experimentally confirmed on the basis of a number of relative measurements made in the period from 1949 through 1960 at a frequency of 81.5 Mc/s. It was now considered important to investigate the dependence of this effect on wavelength and make direct measurements of the decrease of the flux by use of precise absolute measurements. The "artificial moon" method was used in September 1961 for precise absolute measurements at a wavelength of 3.2 cm. The flux, equal to $5.20 \cdot 10^{-24} \text{w/m}^2 \cdot \text{cps}$, was determined with a dispersion of 2.5% and the total measurement error did not exceed 3%. In September 1963 these measurements were repeated at the same wavelength; the antenna, calibration disk and their relative placement were the same

Card 1/2

L 21723-65

ACCESSION NR: AP4043962

as in 1981. The receiver finally used was a radiometer with a parametric amplifier having a sensitivity of 0.2K and a time constant of 1 second. The flux was $5.02 \cdot 10^{-24} \text{ w/m}^2 \cdot \text{cps}$ with a dispersion of 1.7%. If it is assumed that the errors were distributed in conformity with the normal law, the probability of decrease of the flux of Cassiopeia-A exceeds 90% and the most probable value of the decrease of the flux is 1.7% annually, which is in good agreement with theoretical estimates.

ASSOCIATION: Nauchno-issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete (Radio-Physics Scientific Research Institute at Gor'kiy University)

SUBMITTED: 03Dec63

ENCL: 00

SUB CODE: AA

NO REF SOV: 003

OTHER: 001

Card 2/2

L 21724-65 EEC-4/EWG(v)/EMT(1)/EEC(t)/FBD Pe-5/Pi-4/Pae-2 SSD/SSD(b)/
ATFL/SSD(c)/AFETR/ESD(t) GW/WS S/0033/64/041/004/0770/0771
ACCESSION NR: AP4043963

AUTHOR: Lastochkin, V. P.

TITLE: Radio emission spectrum of the discrete source Cygnus-A

B

SOURCE: Astronomicheskiy zhurnal, v. 41, no. 4, 1964, 770-771

TOPIC TAGS: radio emission, astrophysics, artificial moon, Cygnus-A, radio astronomy

ABSTRACT: An absolute measurement of the flux of radio emission from the source Cygnus-A was made at a wavelength of 3.2 cm. Calibration was by the "artificial moon" method, using a true black disk with angular dimensions of 8', placed in the Fraunhofer zone of the antenna. The receiver used was a radiometer with a parametric amplifier having a sensitivity of 0.2K and a time constant of 1 second. The measurements were made with a parabolic antenna with a diameter of 4 m. The determined flux from a total of 100 measurements was $S_{\text{Cyg}} = 1.65 \cdot 10^{-24} \text{ w/m}^2 \text{cps}$. The total rms error did not exceed $\pm 7\%$ of the indicated value. In measurements of the intensity of Cygnus-A it was taken into account that its emission is polarized. In analysis of the records it was assumed that the degree of polarization was 7.5% and the position angle was 143°. Until now, measurements have been made of Cygnus-A at wavelengths of 53.4,

Card 1/3

L 21724-65

ACCESSION NR: AP4043963

42.4, 34.25, 32.6 and 10.26 cm, in all cases using the "artificial moon" for calibration. The spectrum of the source is shown in Fig. 1 of the Enclosure. By using these data it is possible to compute the spectral indices: at wavelengths of 3.2-10.26 cm $\alpha = 1.30 \pm 0.05$; at 10.26-26 cm $\alpha = 1.12 \pm 0.05$; and at 54.9-21 cm $\alpha = 0.85$. At meter wavelengths $\alpha = 0.75$. It follows that the spectral index of the source Cygnus-A increases continuously with an increase in frequency from $\alpha = 0.75$ at meter wavelengths to $\alpha = 1.30$ at 3.2 cm. Therefore, it is impossible to speak of a break in the spectrum in the region of any frequency, as suggested by Karachun, Kuz'min and Salomonovich (Astron. zh., 38, 83, 1961). Orig. art. has: 1 figure.

ASSOCIATION: Nauchno-issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete (Radio-physics Scientific Research Institute at Gor'kly University)

ENCL: 01

SUBMITT ED: 06Dec63

NC REF SOV: 004

OTHER: 001

SUB CODE: AA

Card 2/3

L 1940-66 EBD/EWT(1) GH/HS-2

ACCESSION NR: AP5020672

UR/0033/65/042/004/0705/0708
523.164.42AUTHOR: Lastochkin, V. P.; Lukin, E. B.; Staikevich, K. S.; Tseytlin, N. M.

TITLE: Using lunar occultations to study the Crab Nebula

SOURCE: Astronomicheskiy zhurnal, v. 42, no. 4, 1965, 705-708TOPIC TAGS: radio astronomy, nebula, lunar phenomenon

ABSTRACT: During lunar occultation of a discrete source, the radio waves emitted by the source are diffracted by the surface of the moon, and an observer on the earth sees a distribution of intensities which corresponds to the Fresnel diffraction region. An occultation can be considered as a diffraction on the edge of an infinite half-screen. The width of the interference bands generated by superposition of the direct rays and those reflected from the spherical lunar surface, in a plane perpendicular to the incident rays and passing through the center of the moon, being

$$\delta = \frac{3}{2} a \left(\frac{\lambda}{4a} \right)^{1/2}$$

(where a is the radius of the moon), is smaller by a factor of $10^2 - 10^3$ than Cord 1/4

L 1940-66

ACCESSION NR: AP5020672

the first Fresnel zone $\sqrt{\lambda R}$ (R is the distance to the moon), and consequently the average distribution of the field cannot be altered by possible interference effects. Experimental data on the distribution of intensity during occultations of a source with extremely small angular dimensions agree well with the diffraction pattern of an infinite half-screen. Ordinarily, the antenna is directed toward the discrete source during observation of an occultation, so that the moon is a moving screen. If temperature changes in the antenna due to passage of the moon through the radiation pattern during occultation of the source are disregarded, then the antenna temperature is proportional to:

$$T_A \sim \int \int F(\theta, \phi) T(\theta, \phi) I(\theta - z, \phi) d\theta d\phi$$

where the θ axis is along the direction of motion of the source, $F(\theta, \phi)$ is the antenna pattern, $T(\theta, \phi)$ is the distribution of brightness from the source, and $I(\theta - z, \phi)$ is the distribution of intensity from a point source for the case of diffraction on the edge of an infinite half-screen.

$$I(\theta - z) = \left\{ C \left[(\theta - z) \sqrt{\frac{\pi R}{\lambda}} \right] + \frac{1}{2} \right\}^2 + \left\{ S \left[(\theta - z) \sqrt{\frac{\pi R}{\lambda}} \right] + \frac{1}{2} \right\}^2$$

Card 2/4

L 1940-66

ACCESSION NR: AP5020572

and

$$C(w) = \sqrt{\frac{2}{\pi}} \int_0^w \cos \eta^2 d\eta \quad S(w) = \sqrt{\frac{2}{\pi}} \int_0^w \sin \eta^2 d\eta$$

10

are Fresnel integrals. It is shown that diffraction effects should be taken into account in the reduction of occultation curves even when the source is extended. Three occultations of the Crab Nebula by the moon were observed at 535, 180, and 412 Mc. These occultations were used to obtain data on the angular dimensions of the nebula and on the shift of the effective emission center. The position of the emission center for the nebula is given in Table 1 of the Enclosure, where α and δ are given for points of the source located on the intersection of the source direction of motion with the edge of the lunar disk. "The authors are sincerely grateful to A. G. Kuntsevich⁵³ and V. S. Lazarevskiy⁵⁴ for making the astronomical calculations, and to O. N. Shipule⁵⁵ and G. N. Nikulin⁵⁶ for help in making the measurements." Orig. art. has: 4 figures, 6 formulas, 1 table. [14]

ASSOCIATION: Radiofizicheskiy institut Gor'kovskogo gos. universiteta (Radio-physics Institute, Gorky State University)

55

SUBMITTED: 22Dec54

ENCL: 01

SUB CODE: AA

NO REF Sov: 002

OTHER: 005

ATD PRESS: 4115

Card 3/4

L 1940-66

ACCESSION NR: AP5020672

ENCLOSURE: 01

Table 1.

Frequency, Mc	Transit time of the edge of the moon through the center of the source	α (1950)	$\Delta\alpha$	δ (1950)	Angular diameter	Positional occultation angle
535	18 ^h 59 ^m 9 ^s	5 ^h 31 ^m 30 ^s 9	+0.2 ^s	21°59'4	5.5'	74°
535	20 ^h 07 ^m 3 ^s	5 ^h 31 ^m 20 ^s 3	+0.2 ^s	21°59'3	5.5'	278°
180	14 ^h 03 ^m 5 ^s	5 ^h 31 ^m 31 ^s 4	+0.4 ^s	21°59'4	5.5'	108°
180	15 ^h 07 ^m 0 ^s	5 ^h 31 ^m 29 ^s 6	+0.45 ^s	21°59'3	6'	236°
412	-	-	-	-	6'	127°

Card 4/4

I 7870-66 EWT(d)/FBD/EWT(1)/EEC(k)-2 RB/GW/WS-2

ACC NR: AP5026722

SOURCE CODE: UR/0141/65/008/005/1044/1044

44,55

AUTHOR: Krotikov, V. D.; Lastochkin, V. P.; Stankevich, K. S.

60
B

ORG: Scientific Research Institute of Radio Physics at Gorky University 44,55
(Nauchno-issledovatel'skiy radiofizicheskiy institut pri Gor'kovskom universitete)

TITLE: Measurement of the absorption of decimeter radio waves in the atmosphere

SOURCE: IVUZ. Radiofizika, v. 8, no. 5, 1965, 1044

TOPIC TAGS: radio astronomy, atmospheric radiation, radio wave absorption, deci-meter wave

ABSTRACT: The vertical distribution of the temperature of the intrinsic radiation of the atmosphere was measured at wavelengths 16.3, 18.9, 21, and 30.6 cm in the altitude range from 5 to 30°. The directivity patterns of the antenna system at half-power level were 24', 30', 35', and 40'. The brightness temperatures of the atmosphere were determined by comparing the antenna temperatures for signals from the atmosphere with the discrete source Cassiopeia-A. The total absorption at the zenith could be determined from the measured and theoretical values of the antenna temperature as a function of the altitude angle. The total absorption in the zenith direction was found to be 0.66 db ±15% for all temperatures, corres-

Cord 1/2

UDC: 621.371.166

L 7870-66

ACC NR: AP5026722

ponding to a zenith temperature of 4.1K for the radio emission from the atmosphere.
[02]
Orig. art. has: 2 formulas.

SUB CODE: 03, 17/ SUEM DATE: 23Apr65/ ORIG REF: 002/ ATD PRESS: 4145

Card 2/2

DALMATOV, B.I.; LASTOCHKIN, V.S. (Leningrad)

Ensuring the stability of underground communication wells in
swelling soils. Vod. i san.tekh. no.1:22-25 J³ '59.
(MIRA 12:1)
(Underground construction--Cold weather conditions)

LASTOCHKIN, V.S.

~~Using clayey soils in erecting structures at temperatures below
the freezing point. Nauch.dokl.vys.shkoly; stroi. no.1:309-316
'59.~~

1. Rekomendovana kafedroy osnovaniy i fundamentov Leningradskogo
inzhenerno-stroitel'nogo instituta.
(Earthwork—Cold weather conditions)

LASTOCHKIN, V. S.

Cand Tec Sci, Diss -- "Ensuring the working and packing of cohesive soils at below-freezing temperatures by means of artificial salification". Leningrad, 1961. 22 pp. with graphics, 22 cm (Leningrad Order of Lenin Inst of Engrs of RR Transport imeni Academician V. N. Obraztsov), 200 copies, Not for sale (KL, No 9, 1961, p 183, No 24350). /61-548557

LASTOCHKIN, Viktor Sergeyevich; SEMINA, F.V., red.; PECHERSKAYA, T.I.,
tekhn. red.

[Providing for winter earthwork with cohesive soil by artificial
salinization] Obespechenie proizvodstva zemlianykh rabot so sviate-
nymi gruntami i zimnee vremia putem iskusstvennogo ikh zasolenija.
Irkutsk, Irkutskoe knizhnoe izd-vo, 1962. 62 p. (MIRA 16:4)
(Salt) (Earthwork)

DALMATOV, B.I., doktor tekhn.nauk, prof.; LASTOCHKIN, V.S., mladshiy
nauchnyy sotrudnik

Artificial salinization of cohesive soils. Sbor. nauch. trud.
LISI no.37:19-34 '62. (MIRA 16:3)
(Salt) (Soil mechanics)

MIRONOV, V.Ye.; LASTOCHKIN, Yu.V.; FEDOROV, V.A.

Effect of "outer-sphere" cations on the formation of mercury (II)
chloride complexes. Zhur.neorg.khim. 7 no.10:2323-2325 O '62.
(MIRA 15:10)

(Mercury compounds)

LASTOCHKINA, A. A.

Chemical Abst.
Vol. 48 No. 8
Apr. 25, 1954
Acids, Alkalies, Salts, and Other
Heavy Chemicals

Thermal analysis of the system potassium hydroxide-water. A. I. Niznik and A. A. Lastochkina. Ukrains. Khim. Zhur. 18, 397-404 (1952). The system KOH-H₂O was examd. in the range 63-97% KOH by thermal analysis. In this range the only compd. formed is KOH.H₂O. In about 143° (Pickering, J. Chem. Soc. 63, 830 (1893); Shibaia and Furukawa, J. Sci. Hiroshima Univ. Ser. A, 2, 23 (1931-2)). The mixt. of KOH.H₂O with KOH.H₂O (up to 10%) or with KOH (up to 15%) has a relatively const. m.p. of about 125°. The mixt. of the mono and dihydrates behaves almost like a compd. G. M. K.

S.1200

25508

S/078/61/006/008/007/018
B121/B203

AUTHORS: Sheka, I. A., and Lastochkina, A. A.

TITLE: Reaction of potassium fluozirconate with sodium hydroxide
and ammonium hydroxide in aqueous solutions

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 6, no. 8, 1961, 1868-1874

TEXT: The authors studied the effect of ammonium- and sodium hydroxide concentrations and of the potassium fluozirconate concentration on the composition of basic salts forming in the systems $K_2ZrF_6 - NH_4OH - H_2O$ and $K_2ZrF_6 - NaOH - H_2O$. For determining the composition of basic salts, they used the method of changing the pH of the solution and the determination of the apparent volume of precipitations at $25^{\circ}C$. This method was developed by I. V. Tananayev (Ref. 4: Izv. Sektora fiz.-khim. analiza 20, 277, 1950). It was found that in the reaction of potassium fluozirconate with ammonia or soda lye first a basic salt of the composition $Zr(OH)_2F_2 \cdot nKF \cdot mH_2O$ was formed, and that this salt was converted into $ZrO(OH)F \cdot nKF \cdot mH_2O$ and, finally, to zirconium hydroxide on further addition

Card 1/3

Reaction of potassium...

25508

S/078/61/006/008/007/018
B121/B203

of soda lye and ammonium hydroxide. Pure zirconium hydroxide was formed on addition of 3-5 equivalents of NH_4OH or NaOH to 1 mole of K_2ZrF_6 . At a ratio $\frac{\text{mole NaOH}}{\text{mole K}_2\text{ZrF}_6} = 4.5$, the resulting basic salts were completely destroyed,

and transformed to zirconium hydroxide with very low fluorine content (0.05 - 1 % F). A zirconium hydroxide precipitate containing 9 - 14 % fluorine was formed with the use of ammonium hydroxide as a precipitant at the same ratio of reacting components. Also with addition of the 8-fold quantity of ammonium hydroxide, the zirconium hydroxide precipitated contained 2 - 8 % fluorine. The authors studied the effect of potassium-fluozirconate concentration on the composition of basic salts and hydroxide, and found that the zirconium hydroxide precipitated from concentrated potassium-fluozirconate solution contained more fluorine and potassium impurities than one precipitated from diluted solution. The precipitate from a solution with 20 g/l K_2ZrF_6 contained 24.4 % F, from a solution with 1 g/l K_2ZrF_6 only 11.2 % F under equal conditions of precipitation.

The degree of precipitation of Zr from solutions depends on the potassium-fluozirconate concentration. Zr is completely precipitated from Card 2/3

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concentrated solutions (20 g of K_2ZrF_6 per liter) with the use of 2 equivalents of alkali hydroxide. More than 3 equivalents of alkali hydroxide are required for complete precipitation from diluted solutions (2 - 5 g of K_2ZrF_6 per liter). Basic zirconium salts are stable at pH = 5 - 9, and are converted into pure zirconium hydroxide only at pH > 10. There are 7 figures, 3 tables, and 4 Soviet-bloc references.

ASSOCIATION: Institut obshchey i neorganicheskoy khimii Akademii nauk USSR
(Institute of General and Inorganic Chemistry of the Academy of Sciences UkrSSR)

SUBMITTED: February 23, 1960

Card 3/3

SHEKA, I.A.; LASTOCHKINA, A.A.

Interaction of potassium hexafluorohafniate with ammonia and
alkalies. Zhur. neorg. khim. 8 no.10;2295-2301 O '63.
(MIRA 16:10)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.
(Hafnium compounds) (Alkalies)

LASTOCHKINA, A.A.; SHEKA, I.A.

Interaction of potassium hexafluorotitanate with sodium hydroxide
and ammonia. Ukr. khim. zhur. 30 no.9:896-900 '64. (MIRA 17:10)

1. Institut obshchey i neorganicheskoy khimii AN UkrSSR.

LASTOCHKINA, G.A.

Using glass-reinforced plastic in manufacturing printing machines.
Mashinostroitel' no.5:10-11 My '62. (MIRA 15:5)
(Glass reinforced plastics) (Printing machinery and supplies)

LASTOCHKINA, I. D.

Diagnosis of cancer of the small intestine. Khirurgiia,
Moskva no.7:36-40 July 1951. (CIML 21:1)

1. Of the Hospital Surgical Clinic (Director -- Honored
Worker in Science Prof. V. S. Levit), Second Moscow
Medical Institute imeni Stalin.

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ACCESSION NR: AP5010914

AUTHORS: Temkina, R. Z.; Zabrodkin, A. G.; Yachina, T. V.; Lastochkina, I. I.

TITLE: A method for obtaining ureaformaldehyde resin. Class 39, No. 169781

SOURCE: Byulleten' izobreteni i tovarnykh znakov, no. 7, 1965, 102

TOPIC TAGS: plywood, wood, urea, formaldehyde, resin

ABSTRACT: This Author Certificate presents a method for obtaining urea formaldehyde resin by condensing urea with formaldehyde. To increase the lasting properties of the obtained resin and the speed of its hardening, condensing is conducted in four steps, at 80, 90, 70, and 60C, and at varying proportions of the reacting substances.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut fanery i mebeli
(Central Scientific Research Institute of Plywood and Furniture)

SUBMITTED: 20Feb64

ENCL: 00

SUB CODE: MT

NO REF SDV: 000

OTHER: 000

Card 1/1

MAKSIMOVA, T.V.; LASTOCHKINA, K.D.

Causes of death of bacteria in growing algal cultures. Report No.1
Characteristics of the growth of *Bacillus cereus* and *Pseudomonas*
ovalis in developing cultures of green protococcal algae. *Vest.*
Mosk. un. Ser. 6; Biol., pochv. 19 no.3:40-47 My-Je '64.
(MIRA 17:12)

1. Kafedra mikrobiologii Moskovskogo universitata.

IVANOVA, A.N.; KAL'NOV, Yu.N.; LASTOCHKINA, K.I.; MAKAROVA, I.A.;
KHABAROVA, T.N.

Stratigraphy of Jurassic and Lower Cretaceous sediments in
Astrakhan Province and areas adjacent to the Kalmyk A.S.S.R.
Trudy NVNIIGG no.1:79-86 '64. (MIRA 18:6)